

CLAIMS

What is claimed is:

- 1 1. A method of using a computer for transferring data, comprising:
2 sending a request for data to a targeted computer system;
3 determining if the data is in a look-up list that references other computers having the
4 requested data;
5 sending the request to the other computers having the requested data;
6 encoding the data using an acknowledgement independent equalized data packet
7 encoding scheme;
8 sending the encoded data to a requesting user;
9 receiving the encoded data from sending computers;
10 decoding the received encoded data;
11 saving the decoded data in memory.
- 1 2. The method of claim 1, wherein data transmission is accomplished over a
2 peer-to-peer network.
- 1 3. The method of claim 1, wherein encoded packets are relayed.
- 1 4. The method of claim 1, wherein the look-up list is populated with nodes based
2 on data transfer rates.
- 1 5. The method of claim 1, wherein the look-up list is populated with nodes based
2 on data types stored within the nodes.
- 1 6. The method of claim 1, wherein the look-up list is a mesh list.

1 7. The method of claim 1, wherein the acknowledgement independent equalized
2 data packet encoding scheme is a FEC encoding.

1 8. The method of claim 1, wherein the data that is to be encoded is segmented
2 before encoding.

1 9. The method of claim 1, wherein the received encoded packets are decoded,
2 and then re-encoded for further transmission upon request.

1 10. A method of using a computer for transferring data, comprising:
2 receiving a request for data from a user;
3 determining if the data is in a look-up list that references other
4 computers having the requested data;
5 sending the request to the other computers having the requested data;
6 encoding the data using an acknowledgement independent equalized data packet
7 encoding scheme;
8 sending the encoded data to a requesting user.

1 11. The method of claim 10, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 12. The method of claim 10, wherein encoded packets are relayed.

1 13. The method of claim 10, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 14. The method of claim 10, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

- 1 15. The method of claim 10, wherein the look-up list is a mesh list.
- 1 16. The method of claim 10, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.
- 1 17. The method of claim 10, wherein the data that is to be encoded is segmented
2 before encoding.
- 1 18. A method of using a computer for transferring data, comprising:
2 receiving a request for data from a user;
3 encoding the data using an acknowledgement independent equalized data packet
4 encoding scheme;
5 sending the encoded data to the user.
- 1 19. The method of claim 18, wherein data transmission is accomplished over a
2 peer-to-peer network.
- 1 20. The method of claim 18, wherein encoded packets are relayed.
- 1 21. The method of claim 18, wherein the look-up list is populated with nodes
2 based on data transfer rates.
- 1 22. The method of claim 18, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.
- 1 23. The method of claim 18, wherein the look-up list is a mesh list.
- 1 24. The method of claim 18, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 25. The method of claim 18, wherein the data that is to be encoded is segmented
2 before encoding.

1 26. A method of using a computer for dynamically transferring data, comprising:
2 sending a request for data to a targeted computer capable of servicing the request;
3 receiving acknowledgement independent equalized data packets from sending
4 computers;
5 decoding the received encoded data;
6 saving the decoded data in memory.

1 27. The method of claim 26, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 28. The method of claim 26, wherein encoded packets are relayed.

1 29. The method of claim 26, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 30. The method of claim 26, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 31. The method of claim 26, wherein the look-up list is a mesh list.

1 32. The method of claim 26, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 33. The method of claim 26, wherein the data that is to be encoded is segmented
2 before encoding.

1 34. The method of claim 26, wherein the received encoded packets are decoded,
2 and then re-encoded for further transmission upon request.

1 35. A system for using a computer for transferring data, comprising:
2 means to send a request for data to a targeted computer system;
3 means to determine if the data is in a look-up list that references other computers
4 having the requested data;
5 means to send the request to the other computers having the requested data;
6 means to encode the data using an acknowledgement independent equalized data
7 packet encoding scheme;
8 means to send the encoded data to a requesting user;
9 means to receive the encoded data from sending computers;
10 means to decode the received encoded data;
11 means to save the decoded data in memory.

1 36. The system of claim 35, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 37. The system of claim 35, wherein encoded packets are relayed.

1 38. The system of claim 35, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 39. The system of claim 35, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 40. The system of claim 35, wherein the look-up list is a mesh list.

1 41. The system of claim 35, wherein the acknowledgement independent equalized
2 data packet encoding scheme is a FEC encoding.

1 42. The system of claim 35, wherein the data that is to be encoded is segmented
2 before encoding.

1 43. The system of claim 35, wherein the received encoded packets are decoded,
2 and then re-encoded for further transmission upon request.

1 44. A system for using a computer for transferring data, comprising:
2 means to receive a request for data from a user;
3 means to determine if the data is in a look-up list that references other computers
4 having the requested data;
5 means to send the request to the other computers having the requested data;
6 means to encode the data using an acknowledgement independent equalized data
7 packet encoding scheme;
8 means to send the encoded data to a requesting user.

1 45. The system of claim 44, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 46. The system of claim 44, wherein encoded packets are relayed.

1 47. The system of claim 44, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 48. The system of claim 44, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 49. The system of claim 44, wherein the look-up list is a mesh list.

1 50. The system of claim 44, wherein the acknowledgement independent equalized
2 data packet encoding scheme is a FEC encoding.

1 51. The system of claim 44, wherein the data that is to be encoded is segmented
2 before encoding.

1 52. A system for using a computer for transferring data, comprising:
2 means to receive a request for data from a user;
3 means to encode the data using an acknowledgement independent equalized data
4 packet encoding scheme;
5 means to send the encoded data to the user.

1 53. The system of claim 52, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 54. The system of claim 52, wherein encoded packets are relayed.

1 55. The system of claim 52, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 56. The system of claim 52, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 57. The system of claim 52, wherein the look-up list is a mesh list.

1 58. The system of claim 52, wherein the acknowledgement independent equalized
2 data packet encoding scheme is a FEC encoding.

1 59. The system of claim 52, wherein the data that is to be encoded is segmented
2 before encoding.

1 60. A system for using a computer for dynamically transferring data, comprising:
2 means to send a request for data to a targeted computer capable of servicing the
3 request;

4 means to receive acknowledgement independent equalized data packets from sending
5 computers;

6 means to decode the received encoded data;

7 means to save the decoded data in memory.

1 61. The system of claim 60, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 62. The system of claim 60, wherein encoded packets are relayed.

1 63. The system of claim 60, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 64. The system of claim 60, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 65. The system of claim 60, wherein the look-up list is a mesh list.

1 66. The system of claim 60, wherein the acknowledgement independent equalized
2 data packet encoding scheme is a FEC encoding.

1 67. The system of claim 60, wherein the data that is to be encoded is segmented
2 before encoding.

1 68. The system of claim 60, wherein the received encoded packets are decoded,
2 and then re-encoded for further transmission upon request.

1 69. A program stored on a medium readable by a processor, the program,
2 comprising:
3 a module to send a request for data to a targeted computer system;
4 a module to determine if the data is in a look-up list that references other computers
5 having the requested data;
6 a module to send the request to the other computers having the requested data;
7 a module to encode the data using an acknowledgement independent equalized data
8 packet encoding scheme;
9 a module to send the encoded data to a requesting user;
10 a module to receive the encoded data from sending computers;
11 a module to decode the received encoded data;
12 a module to save the decoded data in memory.

1 70. The medium of claim 69, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 71. The medium of claim 69, wherein encoded packets are relayed.

1 72. The medium of claim 69, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 73. The medium of claim 69, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 74. The medium of claim 69, wherein the look-up list is a mesh list.

1 75. The medium of claim 69, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 76. The medium of claim 69, wherein the data that is to be encoded is segmented
2 before encoding.

1 77. The medium of claim 69, wherein the received encoded packets are decoded,
2 and then re-encoded for further transmission upon request.

1 78. A program stored on a medium readable by a processor, the program,
2 comprising:
3 a module to receive a request for data from a user;
4 a module to determine if the data is in a look-up list that references other computers
5 having the requested data;
6 a module to send the request to the other computers having the requested data;
7 a module to encode the data using an acknowledgement independent equalized data
8 packet encoding scheme;
9 a module to send the encoded data to a requesting user.

1 79. The medium of claim 78, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 80. The medium of claim 78, wherein encoded packets are relayed.

1 81. The medium of claim 78, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 82. The medium of claim 78, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 83. The medium of claim 78, wherein the look-up list is a mesh list.

1 84. The medium of claim 78, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 85. The medium of claim 78, wherein the data that is to be encoded is segmented
2 before encoding.

1 86. A program stored on a medium readable by a processor, the program,
2 comprising:
3 a module to receive a request for data from a user;
4 a module to encode the data using an acknowledgement independent equalized data
5 packet encoding scheme;
6 a module to send the encoded data to the user.

1 87. The medium of claim 86, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 88. The medium of claim 86, wherein encoded packets are relayed.

1 89. The medium of claim 86, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 90. The medium of claim 86, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 91. The medium of claim 86, wherein the look-up list is a mesh list.

1 94. A program stored on a medium readable by a processor, the program,
2 comprising:

5 a module to receive acknowledgement independent equalized data packets from
6 sending computers;

8 a module to save the decoded data in memory.

1 95. The module of claim 94, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 96. The module of claim 94, wherein encoded packets are relayed.

1 97. The module of claim 94, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 98. The module of claim 94, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 99. The module of claim 94, wherein the look-up list is a mesh list.

1 100. The module of claim 94, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 101. The module of claim 94, wherein the data that is to be encoded is segmented
2 before encoding.

1 102. The module of claim 94, wherein the received encoded packets are decoded,
2 and then re-encoded for further transmission upon request.

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- 1 103. A network transmission apparatus, comprising:
2 a processor;
3 a memory, communicatively connected to the processor;
4 a program, stored in the memory, including,
5 a module to send a request for data to a targeted computer system;
6 a module to determine if the data is in a look-up list that references other
7 computers having the requested data;
8 a module to send the request to the other computers having the requested data;
9 a module to encode the data using an acknowledgement independent
10 equalized data packet encoding scheme;
11 a module to send the encoded data to a requesting user;
12 a module to receive the encoded data from sending computers;
13 a module to decode the received encoded data;
14 a module to save the decoded data in memory.
- 1 104. The apparatus of claim 103, wherein data transmission is accomplished over a
2 peer-to-peer network.
- 1 105. The apparatus of claim 103, wherein encoded packets are relayed.
- 1 106. The apparatus of claim 103, wherein the look-up list is populated with nodes
2 based on data transfer rates.
- 1 107. The apparatus of claim 103, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 108. The apparatus of claim 103, wherein the look-up list is a mesh list.

1 109. The apparatus of claim 103, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 110. The apparatus of claim 103, wherein the data that is to be encoded is
2 segmented before encoding.

1 111. The apparatus of claim 103, wherein the received encoded packets are
2 decoded, and then re-encoded for further transmission upon request.

1 112. A network transmission apparatus, comprising:

2 a processor;

3 a memory, communicatively connected to the processor;

4 a program, stored in the memory, including,

5 a module to receive a request for data from a user;

6 a module to determine if the data is in a look-up list that references other

7 computers having the requested data;

8 a module to send the request to the other computers having the requested data;

9 a module to encode the data using an acknowledgement independent

10 equalized data packet encoding scheme;

11 a module to send the encoded data to a requesting user.

1 113. The apparatus of claim 112, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 114. The apparatus of claim 112, wherein encoded packets are relayed.

1 115. The apparatus of claim 112, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 116. The apparatus of claim 112, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 117. The apparatus of claim 112, wherein the look-up list is a mesh list.

1 118. The apparatus of claim 112, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 119. The apparatus of claim 112, wherein the data that is to be encoded is
2 segmented before encoding.

1 120. A network transmission apparatus, comprising:

2 a processor;

3 a memory, communicatively connected to the processor;

4 a program, stored in the memory, including,

5 a module to receive a request for data from a user;

6 a module to encode the data using an acknowledgement independent

7 equalized data packet encoding scheme;

8 a module to send the encoded data to the user.

1 121. The apparatus of claim 120, wherein data transmission is accomplished over a
2 peer-to-peer network.

1 122. The apparatus of claim 120, wherein encoded packets are relayed.

1 123. The apparatus of claim 120, wherein the look-up list is populated with nodes
2 based on data transfer rates.

1 124. The apparatus of claim 120, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.

1 125. The apparatus of claim 120, wherein the look-up list is a mesh list.

1 126. The apparatus of claim 120, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.

1 127. The apparatus of claim 120, wherein the data that is to be encoded is
2 segmented before encoding.

1 128. A network transmission apparatus, comprising:

2 a processor;

3 a memory, communicatively connected to the processor;

4 a program, stored in the memory, including,

5 a module to send a request for data to a targeted computer capable of servicing
6 the request;

7 a module to receive acknowledgement independent equalized data packets
8 from sending computers;

9 a module to decode the received encoded data;

10 a module to save the decoded data in memory.

1 129. The apparatus of claim 128, wherein data transmission is accomplished over a
2 peer-to-peer network.

- 1 130. The apparatus of claim 128, wherein encoded packets are relayed.
- 1 131. The apparatus of claim 128, wherein the look-up list is populated with nodes
2 based on data transfer rates.
- 1 132. The apparatus of claim 128, wherein the look-up list is populated with nodes
2 based on data types stored within the nodes.
- 1 133. The apparatus of claim 128, wherein the look-up list is a mesh list.
- 1 134. The apparatus of claim 128, wherein the acknowledgement independent
2 equalized data packet encoding scheme is a FEC encoding.
- 1 135. The apparatus of claim 128, wherein the data that is to be encoded is
2 segmented before encoding.
- 1 136. The apparatus of claim 128, wherein the received encoded packets are
2 decoded, and then re-encoded for further transmission upon request.